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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,266	07/21/2005	Hiroyuki Hiraishi	A-484	4718

802 7590 04/24/2007

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EXAMINER	
VIDWAN, JASJIT S	
ART UNIT	PAPER NUMBER
2182	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/507,266	HIRAISHI, HIROYUKI	
	Examiner	Art Unit	
	Jasjit S. Vidwan	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 January 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. *Claims 1, 11 and14 are rejected under 35 U.S.C. 102(e) as being anticipated by Geiger et al, U.S. Pub No: 2002/0101367* ***[herein after Geiger]***.

3. **As per Claim 1, 11 and 14**, Geiger teaches a compressed data processing apparatus **[see Paragraph 0009, "Compression/Decompression (codec) system"]** into which is input compressed data **[see Fig. 2, element 270B – the figure is labeled as 270A "Uncompressed data" – however as per the specification, the said element is a typo]** for which data restoration is performed by carrying out a first part of decompression processing and a second part of decompression processing **[see Fig. 2, elements 550A...D – Examiner construes Applicant's above limitation as well as Geiger's teachings as follow: Even as amended, Applicant's intentions of claiming the idea that only portion of the compressed data by the plurality of 'first part decompression processing units' is processed is not sufficiently met. Examiner's broadest reasonable interpretation of the above claim in light of Geiger's teaching can be that of the compressed data (270B) that is input into codec system wherein the splitting logic 280 divides the compressed data into "parts" thereby having element 550A work on 'first part', 550B the second, 550C the third and so on],** the compressed data processing apparatus comprising:

> (a) Compressed data acquisition unit **[see Fig. 2, element 280, "Splitting logic"]** that acquires a plurality of the compressed data as an object for synthesis **[see Paragraph 0072]**

(b) Plurality of first part decompression processing units **[Fig. 2, elements 550A-D]** that perform the first part of decompression processing with respect to each of the plurality of compressed data acquired by the compressed data acquisition unit **[see Paragraph 0073 – also see Paragraph 0078 – only the "first part" is decompressed & then the "second"]**

(c) Synthesis unit **[Fig. 2, element 290, "Merging Logic"]** that synthesizes a plurality of intermediate data **[see Paragraph 0077 – intermediate data being data that is only portion of the whole data that was input initially – As recited, claim language does not define intermediate data as "data that is intermediate between compressed data and non-compressed data form/state" as argued by applicant]** output by the plurality of the first part decompression processing units **[see Paragraph 0076]**

4. *Claims 9 & 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Mase, U.S. Pub No: 2002/0051263* ***[herein after Mase]***.

5. **As per Claim 9**, Mase teaches compressed data processing apparatus **[see Fig. 1, element 6, "Data Decompressor"]** into which is input compressed data **[see Paragraph 0010, "Compressed moving image data"]** for which data restoration is performed by carrying out decompression processing **[see Fig. 4, elements S11-S19]**, characterized in that the compressed data processing apparatus comprises a compressed data acquisition unit **[see Fig. 1, element 208]** that acquires a plurality of the compressed data as an object for synthesis, a synthesis unit **[see Fig. 1, element 206]** that synthesizes the plurality of compressed data acquired by the compressed data acquisition unit, and a decompression processing unit **[see Fig. 1, elements 20 and 22]** that performs the decompression processing for compressed data that has undergone synthesis that is output from the synthesis unit, said decompression processing unit performing the decompression processing to obtain non-compressed data **[see Page 3, paragraph 0018]**.

6. **As per Claim 10,** Mase teaches compressed data processing apparatus wherein the compressed data is compressed audio data **[see Mase, Paragraph 0053]**

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. *Claims 2, 7, 8, 12 & 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geiger and Mase, U.S. Pub No: 20020051263* ***[herein after Mase]***.

9. **As per Claims 2, 12 and 15**, Geiger teaches the limitations of Claims 1, 11 and 14. In addition, Geiger teaches a system wherein not all of the compressed data is decompressed in one step. Moreover, according to Geiger's teachings, data can be broken into multiple parts and run through the same plurality of decompressor until all the data has been decompressed **[see Geiger, Paragraph 0078]**. Geiger, however, does not teach a system wherein the second part of decompression is handled by separate decompression processing units. Mase elaborates on Geiger's deficiency by including a first and second decompressor wherein the portion of the compressed data is decompressed using the first decompressor **[Fig. 1, element 20, "First image decompressor" – see Paragraph 0014, In the first image decompression step, the compressed image data on the partial area is decompressed]** and the second portion by the second decompressor **[Fig. 1, element 22, "second Image decompressor" – In the second image decompression step, the remaining compressed frame data extracted in the compressed image data extraction is decompressed]**.

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to combine the above two teachings in order to take advantage of high compressibility and high quality

rendering data **[see Mase, Paragraph 0006]**. It is for this reason that one of ordinary skill in the art at the time of Applicant's invention would have been motivated to combine the two teachings above in order to take advantage of high compressibility and high quality rendering data **[see Mase, Paragraph 0006]**.

10. **As per Claim 7**, Geiger as modified by Mase teaches a compressed data processing apparatus wherein the compressed data is compressed audio data in MPEG audio format **[see Mase, Paragraph 0053, "MPEG standard"]**, audio data of each of a plurality of frequency bands is decompressed by the first part of decompression processing **[See Mase, Paragraph 0040 – "The first image decompressor decompresses the partial area compressed image data which is extracted by the compressed image data extractor into image data before data compression]**, and inverse frequency transformation is performed using the audio data of each of the plurality of frequency bands by the second part of decompression processing **[see Mase, Paragraph 0041 – "The second image decompressor decompresses the compressed frame data extracted by the compressed image data extractor into image data before data compression"]**.

11. **As per Claim 8**, Geiger as modified by Mase teaches a compressed data processing apparatus wherein the second part of decompression processing is processing that enable synthesis together of data prior to processing to be equivalent to synthesis together of data after processing **[see Fig. 2, element 26, "Image Synthesizer"]** and the first part of decompression processing is processing that does not enable synthesis together of data prior to processing to be equivalent to synthesis together of data after processing **[see Mase, Paragraphs 0077 & 0078]**.

12. *Claims 3, 13, 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Geiger and further in view of Simard et al U.S. Patent No: 6,940,826* ***[herein after Simard]***.

13. **As per Claims 3, 13 and 16**, Geiger teaches the limitations of Claims 1, 11 and 14, however fails to teach a system wherein the apparatus further comprising of a compression processing unit that performs compression processing as inverse transformation of the first decompression processing with respect to intermediate data output from the synthesis. Simard of analogous art teaches the above

missing limitation of having a compression processing unit that performs compression processing as inverse transformation of the first decompression processing with respect to intermediate data output from the synthesis unit **[see Simard, Fig. 3A, element 44 – also see Fig. 7, element 78 – The intermediate data being the "first part" of uncompressed data as taught by Geiger in Paragraph 0078]**

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to combine the two teachings in order to take advantage of making the said data compressed and thus easier to transfer to its individual destinations **[Col. 3, Lines 7-23]**. It is for this reason that one of ordinary skill in the art at the time of Applicant's invention would have been motivated to combine the two teachings in order to take advantage of making the said data compressed and thus easier to transfer to its individual destinations **[Col. 3, Lines 7-23]**.

14. *Claims 4, 5 and 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Geiger further in view of Fujiwara et al, U.S. Patent No: 5,729,517* ***[herein after Fujiwara]***

15. **As per Claim 4,** Geiger teaches the limitations of Claim 1, however fails to teach a weight assignment-processing unit that is provided at a stage prior to synthesis unit. However, Fujiwara teaches the above limitation of having a weight assignment-processing unit that is provided at a stage prior to synthesis **[see Fujiwara Col. 2, Lines 60-65]**.

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to combine the two teachings in order to take advantage of having a data detecting circuit that can decode data at more satisfactory error rate **[see Fujiwara Col. 3, Lines 4-5]**. It is for this reason that one of ordinary skill in the art at the time of Applicant's invention would have been motivated to combine the two teachings in order to take advantage of having a data detecting circuit that can decode data at more satisfactory error rate **[see Fujiwara Col. 3, Lines 4-5]**.

16. **As per Claim 5**, Geiger and Fujiwara as modified above teach a compressed data is compressed audio data **[see Geiger, Paragraph 0113]**.

17. **As per Claim 6,** Geiger and Fujiwara as modified above teach a compressed data processing apparatus wherein the compressed data is compressed audio data **[see Geiger, Paragraph 0113]** and the weight assignment processing is volume balance control processing **[see Fujiwara, Col. 2, Lines 60-67]**

Response to Arguments

18. Applicant's arguments, see Remarks, filed 1/31/07, with respect to the rejection(s) of claim(s) 1-16 under Yekutiely and Simard have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Geiger et al and further in view of Mase.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasjit S. Vidwan whose telephone number is (571) 272-7936. The examiner can normally be reached on 8am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KIM HUYNH can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KIM HUYNH
SUPERVISORY PATENT EXAMINER
4/16/07